CLAIMS:

1. A system for heating a biological site in a patient's body, the system including:

a transformer having a primary winding and a secondary winding, the secondary winding having at least one tap to provide a ground reference and at least two sources of radio frequency (RF) energy; and

at least one active electrode connected to each source to apply energy from its associated source to the site, the energy applied by the at least one electrode of any one of the sources being out of phase with the energy applied by the at least one electrode of any of the other sources.

2. The system of claim 1 which includes an energy generator for generating the RF energy, the primary winding of the transformer being connected to an output of the energy generator.

3. The system of claim 1 or claim 2 in which a reference electrode is connected to the at least one tap.

4. The system of any one of the preceding claims in which the transformer has a 1:1 ratio between the primary winding and the secondary winding.

5. The system of any one of the preceding claims in which the tap is a centre tap to provide two sub-windings which act as energy sources with the energy supplied by the sources being 180° out of phase with respect to each other.

6. The system of claim 5 in which at least one active electrode is connected to a free end of each sub-winding opposite the end of the sub-winding connected to the tap.

7. The system of claim 6 in which a plurality of electrodes are connected to the free end of each sub-winding, the electrodes being arranged in groups relative to the site.

8. The system of claim 6 or claim 7 in which the secondary winding has at least one intermediate tap between the ground reference tap and the free end of each sub-winding to provide more than two sub-windings acting as energy sources with at least one active electrode being connected to each intermediate tap.

9. The system of any one of the preceding claims in which the at least one active electrode is an electrode assembly comprising a co-axially arranged pair of electrodes, the electrodes of the assembly being displaceably arranged relative to each other.

10 The system of claim 9 in which at least one of the electrodes has a helical tip to be screwed into the site.

11. The system of claim 10 in which both electrodes of the assembly are helical-tipped to be screwed into the site.

12. The system of claim 11 in which the helical-tipped electrodes are of different pitches so that the depth into the site to which the electrodes extend, in use, differ with respect to each other.

13. A method of heating a biological site in a patient's body the method including the steps of:

providing a transformer having a primary winding and a secondary winding, the secondary winding having at least one tap to provide a ground reference and at least two sources of RF energy;

connecting at least one active electrode to each source; and

attaching the at least one active electrode from each source to the site and applying the energy from the sources to the site, the energy applied by the at least one electrode of any one of the sources being out of phase with the energy applied by the at least one electrode of any of the other sources.

14. The method of claim 13 which includes providing an energy generator for generating the RF energy and connecting the primary winding of the transformer to an output of the generator.

15. The method of claim 13 or claim 14 which includes connecting a reference electrode to the at least one tap.

16. The method of any one of claims 13 to 15 which includes selecting the transformer to have a 1:1 ratio between the primary winding and the secondary winding.

17. The method of any one of claims 13 to 16 which includes centre-tapping the transformer to provide two sub-windings which act as energy sources with the energy supplied by the sources being 180° out of phase with respect to each other.

18. The method of claim 17 which includes connecting at least one active electrode to a free end of each sub-winding opposite the end of the sub-winding connected to the tap.

19. The method of claim 18 which includes connecting a plurality of electrodes to the free end of each sub-winding and arranging the electrodes in groups relative to the site.

20. The method of claim 18 or claim 19 which includes forming at least one intermediate tap between the ground reference tap and the free end of each sub-winding to provide more than two sub-windings acting as energy sources and connecting at least one active electrode to each intermediate tap.

21. The method of any one of claims 18 to 20 which includes arranging the electrodes transmurally at the site.

22. The method of any one of claims 18 to 21 which includes arranging the at least one active electrode as a co-axially arranged pair of electrodes, the electrodes of the pair being displaceably arranged relative to each other.

23. The method of claim 22 which includes providing at least one of the co-axially arranged pair of electrodes with a helical tip.

24. The method of claim 23 in which both electrodes of the co-axially arranged pair of electrodes are helical-tipped and in which the method includes screwing the electrodes into the site to different depths to heat the site to the required depth.

25. A component for use in heating a biological site in a patient's body, the component including a pair of co-axially arranged electrodes, at least one of which has a helical tip.

26. The component of claim 25 in which both electrodes have helical tips.

27. The component of claim 26 in which a pitch of one tip differs with respect to a pitch of the other tip.